

Camera operators in entry-level jobs, including cinematography assistants, learn to set up lights, cameras, and other equipment. They may receive routine assignments requiring camera adjustments or decisions on what subject matter to capture. With increased experience, they may advance to more demanding assignments. Camera operators in the film and television industries usually are hired for a project based on recommendations from individuals such as producers, directors of photography, and camera assistants from previous projects, or through interviews with the producer. ENG and studio camera operators who work for television affiliates usually start in small markets to gain experience. Advancement for them means moving to larger media markets. Other camera operators may become directors of photography for movie studios, advertising agencies, or television programs.

Photographers and camera operators who wish to operate their own businesses, or freelance, need business skills as well as talent. These individuals must know how to submit bids; write contracts; hire models, if needed; get permission to shoot on locations that normally are not open to the public; obtain releases to use photographs of people; price photographs; know about copyright protection for their work; and keep financial records. Freelance photographers also should develop an individual style of photography in order to differentiate themselves from the competition. Some photographers enter the field by submitting unsolicited photographs to magazines and art directors at advertising agencies.

### Job Outlook

Keen competition is expected for photographer and camera operator job openings because they attract so many people. The number of individuals interested in positions such as commercial photographer, photojournalist, and movie camera operator, is usually much greater than the number of openings. Those who succeed in landing a salaried job or attracting enough work to earn a living by freelancing are likely to be the most creative, able to adapt to rapidly changing technologies, and adept at operating a business. Related work experience, job-related training, or some unique skill or talent—such as a background in computers or electronics—also are beneficial to prospective photographers or camera operators. Often, new job entry requirements emerge, because employers can pick and choose among the most qualified and the most experienced applicants. For example, most photojournalists enter the field with a degree in journalism and are held to the same ethical standards as reporters and journalists.

Employment of photographers is expected to increase more slowly than the average for all occupations through 2008. Declines in the newspaper industry over the next decade should reduce demand for photographers to provide still images for print. Demand for photographers in radio and television broadcasting is expected to increase relative to other occupations in the industry because digital photography allows photographers to cover events more quickly and from remote locations. However, the industry is growing very little, so employment gains for photographers will be modest. On the other hand, demand for photographers is growing in news and wire services operations, where photographers using digital equipment will be needed to transmit digital images interactively. Demand for portrait photographers also should increase as the population grows. And, as the number of electronic versions of magazines, journals, and newspapers grows on the Internet, photographers will be needed to provide digital images.

Employment of camera operators is expected to increase faster than the average for all occupations through 2008. The rapid expansion of the entertainment market, especially the cable and other pay television services, will spur the growth of camera operators. Modest growth also is expected in the motion picture production and distribution industry resulting, in part, from the increase in the number of feature films that will be produced over the next decade, but also because computer and Internet services provide

new outlets for interactive productions. Made-for-the-Internet broadcasts include live music videos, digital movies, sports, and general information or entertainment programming. These images can be delivered directly into the home either on compact discs or over the Internet through telephone lines.

### Earnings

Median annual earnings of photographers in 1998 were \$20,940. The middle 50 percent earned between \$15,250 and \$30,820. The lowest 10 percent earned less than \$12,490 and the highest 10 percent earned more than \$43,860. Median annual earnings in the industries employing the largest number of photographers in 1997 were:

Radio and television broadcasting .....	\$27,400
Newspapers .....	24,100
Photographic studios, portrait .....	16,800

Median annual earnings for television, motion picture, and video camera operators were \$21,530 in 1998. The middle 50 percent earned between \$15,330 and \$34,200. The lowest 10 percent earned less than \$27,790 and the highest 10 percent earned more than \$53,470. Median annual earnings of television, motion picture, and video camera operators in the radio and television broadcasting industry in 1997 were \$17,000.

Most salaried photographers work full time and earn more than the majority of self-employed photographers, many of whom work part time, but some self-employed photographers also have high earnings. Many camera operators who work in film or video are freelancers; their earnings tend to fluctuate each year.

Unlike photojournalists and commercial photographers, few fine arts photographers are successful enough to support themselves solely through their art.

### Related Occupations

Other jobs requiring visual arts talents include illustrators, designers, painters, sculptors, and photo editors.

### Sources of Additional Information

Career information on photography is available from:

- ☛ Professional Photographers of America, Inc., 229 Peachtree St., NE, Suite 2200, Atlanta, GA 30303.
- ☛ Advertising Photographers of America, 7201 Melrose Ave., Los Angeles, CA 90046.

## Visual Artists

(O\*NET 34035A, 34035B, 34035C, 34035D, 34035E, 34038E, 39999E, and 39999H)

### Significant Points

- Nearly 60 percent are self-employed—about six times the proportion in all professional occupations.
- Visual artists usually develop their skills through a bachelor's degree program or other postsecondary training in art or design.
- Keen competition is expected for both salaried jobs and freelance work, because many talented people are attracted to the glamorous and exciting image of the graphic and fine arts fields.

### Nature of the Work

Visual artists create art to communicate ideas, thoughts, or feelings. They use a variety of methods—painting, sculpting, or illustration—

and an assortment of materials, including oils, watercolors, acrylics, pastels, pencils, pen and ink, plaster, clay, and computers. Visual artists' works may be realistic, stylized, or abstract and may depict objects, people, nature, or events.

Visual artists generally fall into one of three categories. Fine artists create art to satisfy their own need for self-expression. Illustrators and graphic designers, on the other hand, put their artistic skills at the service of commercial clients, such as major corporations; retail stores; and advertising, design, and publishing firms. (Designers other than graphic designers are discussed in a separate *Handbook* statement.)

*Fine artists* display their work in museums, commercial art galleries, corporate collections, and private homes. Some of their artwork may be commissioned (done on request from clients), but mostly it is sold on consignment through private art galleries or dealers. The gallery and artist predetermine how much each will earn from a consignment sale. Only the most successful fine artists are able to support themselves solely through the sale of their works. Most fine artists also hold other jobs. Those with teaching certificates may teach art in elementary or secondary schools, whereas those with a master's or doctorate degree may teach art in colleges or universities. Some fine artists work in arts administration in local, State, or Federal government arts programs. Others work in museums or art galleries as fine arts directors or as curators, who plan and set up art exhibits. Some of these artists work as art critics for newspapers or magazines, and some work as consultants to foundations or institutional collectors. Fine artists also give private art lessons. Sometimes fine artists must work in an unrelated field to support their art careers.

Fine artists work independently. Usually, fine artists specialize in one or two art forms, such as painting, sculpting, printmaking, and restoring. *Painters* work with two-dimensional art forms. These artists use shading, perspective, and color to produce works that depict realistic scenes or abstract expressions to evoke different moods and emotions.

*Sculptors* design three-dimensional art works—either by molding and joining materials such as clay, glass, wire, plastic, fabric, or metal or by cutting and carving forms from a block of plaster, wood, or stone. Some sculptors combine various materials to create mixed-media works. In recent years, some sculptors have incorporated light, sound, and motion into their works.

*Printmakers* create printed images from designs cut or etched into wood, stone, or metal. After cutting the design, the artist inks the surface of the woodblock or stone and rolls or stamps it onto paper to make an impression. Some printmakers make prints by graphically encoding data and processing it, using a computer. The computer-enhanced images are printed using printers with specially loaded software or are transmitted electronically to be viewed on the Internet.

*Painting restorers* preserve and restore damaged and faded paintings. They apply solvents and cleaning agents to clean the surfaces, reconstruct or retouch damaged areas, and apply preservatives to protect the paintings. This is very detailed work and usually is reserved for experts in the field.

*Illustrators* paint or draw pictures for books, magazines, and other publications; films; and paper products, including wrapping paper, stationery, greeting cards and calendars. Some work may be done using computers, which allow ideas to be mailed electronically between clients or presented on the Internet. Many of these artists do a variety of illustrations, whereas others specialize in a particular style, such as medical illustration, fashion illustration, cartoons, or animation.

Some illustrators draw storyboards for television commercials, movies, and animated features. Storyboards present television commercials in a series of scenes similar to a comic strip and allow an advertising agency to evaluate proposed commercials with the company doing the advertising. Storyboards also serve as guides to placing actors and cameras and to other details during the production of commercials.

*Medical and scientific illustrators* combine artistic skills with knowledge of the biological sciences. Medical illustrators draw illustrations of human anatomy and surgical procedures. Scientific illustrators draw illustrations of animals and plants. These illustrations are used in medical and scientific publications and in audiovisual presentations for teaching purposes. Medical illustrators also work for lawyers, producing exhibits for court cases and doctors.

*Fashion artists* draw illustrations of women's, men's, and children's clothing and accessories for newspapers, magazines, and other media.

*Cartoonists* draw political, advertising, social, and sports cartoons. Some cartoonists work with others who create the idea or story and write the captions. Most cartoonists, however, have humorous, critical, or dramatic talents, in addition to drawing skills.

*Animators* work in the motion picture and television industries. They draw by hand and use computers to create the large series of pictures which, when transferred to film or tape, form the animated cartoons seen in movies and on television.

*Graphic designers* use a variety of print, electronic, and film media to create designs that meet client needs. Most graphic designers use computer software to generate new images. They design promotional displays and marketing brochures for products and services, develop distinctive company logos for products and businesses, and create visual designs of annual reports and other corporate literature. Additionally, graphic designers, usually under the supervision of a design or art director, develop the overall layout and design of magazines, newspapers, journals, corporate reports, and other publications. Many graphic designers develop the graphics and layout of Internet websites. Graphic designers also produce the credits that appear before and after television programs and movies.

Freelance graphic designers put their artistic skills and vision to work on a project-by-project arrangement while working on a contract basis with other companies.

*Art directors* develop design concepts and review the material that is to appear in periodicals, newspapers, and other printed or visual media. They decide how best to present the information visually, so it is eye-catching, appealing, and organized. They make decisions about which photographs or artwork to use and oversee the layout design and production of the printed material. Art directors also may review graphics that appear on the Internet.

## Working Conditions

Most visual artists work in art and design studios located in office buildings, or they work in their own homes. Some fine artists share studio space, where they also may exhibit their work. Studio surroundings usually are well lighted and ventilated; however, fine



*Most visual artists are self-employed.*

artists may be exposed to fumes from glue, paint, ink, and other materials. Graphic designers or illustrators who sit at drafting tables or use computers for extended periods of time may experience back pain, eye strain, or carpal tunnel syndrome.

Graphic designers and illustrators employed by publishing companies, art and design studios, and graphic design firms generally work a standard 40-hour week. During busy periods, they may work overtime to meet deadlines. Fine artists and self-employed graphic designers and illustrators can set their own hours, but may spend much time and effort selling their services to potential customers or clients and building a reputation.

### Employment

Visual artists held about 308,000 jobs in 1998. Nearly 6 out of 10 were self-employed. Self-employed visual artists either are graphic designers who freelance, offering their services to advertising agencies, publishing houses, and other businesses, or fine artists who earn income when they sell a painting or other work of art.

Of the visual artists who were not self-employed, many were graphic designers who worked for advertising agencies, design firms, commercial art and reproduction firms, or printing and publishing companies. Other visual artists were employed by the motion picture and television industries, wholesale and retail trade establishments, and public relations firms.

### Training, Other Qualifications, and Advancement

Training requirements for visual artists vary, depending upon the specialty. Although formal training is not strictly necessary for fine artists, it is very difficult to become skilled enough to make a living without some training. Many colleges and universities offer degree programs leading to the bachelor in fine arts (BFA) and master in fine arts (MFA) degrees. Coursework usually includes core subjects, such as English, social science, and natural science, in addition to art history and studio art. Art schools also offer postsecondary studio training in the fine arts. Typically, these programs focus more intensively on studio work than the academic programs in a university setting. Those who want to teach fine arts at the elementary or secondary levels must have a teaching certificate in addition to a bachelor's degree. An advanced degree in fine arts or arts administration is necessary for management or administrative positions in government or in foundations or for teaching in colleges and universities. (See the statements for college and university faculty; and kindergarten, elementary, and secondary school teachers elsewhere in the *Handbook*.)

Graphic designers must demonstrate artistic ability and creative thinking. Academic training leading to a bachelor's degree in art or design has almost become a necessity.

Illustrators learn drawing and sketching skills through training in art programs and extensive practice. Most employers prefer candidates with a bachelor's degree; however, some illustrators may be contracted based on past work.

The appropriate training and education for prospective medical illustrators is more specific. Medical illustrators must have both a demonstrated artistic ability and a detailed knowledge of living organisms, surgical and medical procedures, and human and animal anatomy. A 4-year bachelor's degree combining art and pre-medical courses usually is necessary, followed by a master's degree in medical illustration. This degree is offered in only five accredited schools in the United States.

Evidence of appropriate talent and skill, displayed in an artist's portfolio, is an important factor used by art and design directors, clients, and others in deciding whether to hire or contract out work. The portfolio is a collection of hand-made, computer-generated, photographic, or printed samples of the artist's best work. Assembling a successful portfolio requires skills usually developed in a bachelor's degree program or other postsecondary training in art, design, or visual communications. Internships also provide

excellent opportunities for visual artists to develop and enhance their portfolios. Formal educational programs in art and design also provide training in computer techniques. Computers are used widely in the visual arts, and knowledge and training in them are critical for many jobs in these fields. Graphic designers, especially those who are new to the field or who work on a freelance basis, need good communication skills to convey their ideas to clients and to contract for services.

Visual artists hired by advertising agencies or graphic design studios often start with relatively routine work. While doing this work, however, they may observe and practice their skills on the side. Many visual artists freelance on a part-time basis while continuing to hold a full-time job until they are established. Others freelance part-time while still in school, to develop experience and to build a portfolio of published work.

Freelance visual artists try to develop a set of clients who regularly contract for work. Some freelance artists are widely recognized for their skill in specialties such as magazine or children's book illustration. These artists may earn high incomes and can pick and choose the type of work they do.

Fine artists and illustrators advance professionally as their work circulates and as they establish a reputation for a particular style. Many of the most successful artists and illustrators continually develop new ideas, and their work often evolves over time. Graphic designers may advance to assistant art director, art director, design director, and in some companies, creative director of an art or design department. Some artists prosper enough to succeed as freelance designers or to specialize in a particular area. Some graphic designers design web pages for their company's Internet site. Others open their own businesses.

### Job Outlook

Employment of visual artists is expected to grow faster than the average for all occupations through the year 2008. Because the visual arts attract many talented people with creative ability, the number of aspiring visual artists continues to grow. Consequently, competition for both salaried jobs and freelance work in some, but not all, areas of visual arts is expected to be keen.

Fine artists mostly work on a freelance, or commission, basis and may find it difficult to earn a living solely by selling their artwork. Only the most successful fine artists receive major commissions for their work. Competition among artists for the privilege of being shown in galleries is expected to remain acute. And grants from sponsors such as private foundations, State and local arts councils, and the National Endowment for the Arts, should remain competitive. Nonetheless, studios, galleries, and individual clients are always on the lookout for artists who display outstanding talent, creativity, and style. Population growth, rising incomes, and growth in the number of people who appreciate fine arts will contribute to the demand for fine artists. Talented fine artists who have developed a mastery of artistic techniques and skills, including computer skills, will have the best job prospects.

The need for visual artists to illustrate and animate materials for magazines, journals, and other printed or electronic media will spur demand for illustrators of all types. Growth in the entertainment industry, including cable and other pay television broadcasting and motion picture production and distribution, will provide new job opportunities for cartoonists and animators. Competition for most illustration jobs, however, will be strong, because job opportunities are relatively few and the number of people interested in these positions usually exceeds the number of available openings. Employers should be able to choose among the most qualified candidates.

Very good opportunities for graphic designers are expected. Continuing growth of the Internet should provide many job opportunities, largely due to the demand for graphic designers to design and develop the layout of web pages. Additionally, businesses will

continue to put emphasis on visually appealing concepts for use in communications, package design, publications, advertising, marketing, and television and video production, all of which require the skills of graphic designers. Despite strong demand for both freelance and salaried graphic designers, competition will be stiff for the best jobs because employers are willing to make attractive offers to the most talented and creative candidates.

Earnings

Median annual earnings of visual artists were about \$31,690 a year in 1998. The middle 50 percent earned between \$23,790 and \$41,980 a year. The lowest 10 percent earned less than \$17,910 and the highest 10 percent earned more than \$64,580. Median annual earnings in the industries employing the largest number of visual artists in 1997 were as follows:

Advertising .....	\$34,800
Periodicals .....	33,000
Mailing, reproduction, stenographic services .....	32,700
Commercial printing .....	24,700
Newspapers .....	24,100

Earnings for self-employed visual artists vary widely. Some charge only a nominal fee while they gain experience and build a reputation for their work. Others, such as well-established freelance graphic designers and fine artists, can earn much more than salaried

artists do. Like other self-employed workers, freelance artists must provide their own benefits.

Related Occupations

Many occupations in the advertising industry, such as account executive and creative director, are related to the fine arts and graphic design. Other workers who apply visual art skills include architects; landscape architects; photographers; and floral, industrial, and interior designers. Various printing occupations also are related to visual art, as is the work of art and design teachers. In addition, several occupational options associated with the Internet have emerged—for example, webmaster and Internet page designer. These jobs often require artistic talent, as well as computer skills.

Sources of Additional Information

For an order form for a directory of accredited college-level programs in art and design (available for \$15.00) or career information in visual arts occupations, contact:

☛ The National Association of Schools of Art and Design, 11250 Roger Bacon Dr., Suite 21, Reston, VA 20190.

For information on careers in medical illustration, contact:

☛ The Association of Medical Illustrators, 2965 Flowers Road South, Suite 105, Atlanta, GA 30341.

For a list of schools offering degree programs in graphic design, contact:

☛ The American Institute of Graphic Arts, 164 Fifth Ave., New York, NY 10010.

Performing Arts Occupations

Actors, Directors, and Producers

(O\*NET 34047F, 34056A, 34056B, 34056D, 34056E, 34056F, 34056G, 34056H, 34056J, and 34056K)

Significant Points

- Aspiring actors face frequent rejections in auditions and long periods of unemployment; competition for roles is often intense.
- While formal training is helpful, experience and talent are more important for success in this field.
- Because of erratic employment, earnings for actors are relatively low.

Nature of the Work

Although most people associate actors, directors, and producers with the screens of Hollywood or stages of Broadway, these workers are more likely to be found in a local theatre, television studio, circus, or comedy club. Actors, directors, and producers include workers as diverse as narrators; clowns; comedians; acrobats; jugglers; stunt, rodeo, and aquatic performers; casting, stage, news, sports, and public service directors; production, stage, and artist and repertoire managers; and producers and their assistants. In essence, actors, directors, and producers express ideas and create images in theaters, film, radio, television, and a variety of other media. They “make the words come alive” for their audiences.

Actors entertain and communicate with people through their interpretation of dramatic roles. However, only a few actors ever achieve recognition as stars—whether on stage, in motion pictures, or on television. A few others are well-known, experienced performers, who frequently are cast in supporting roles. Most actors struggle for a toehold in the profession and pick up parts wherever they can.

Although actors often prefer a certain type of role, experience is so important to success in this field that even established actors continue to accept small roles, including commercials and product endorsements. Other actors work as background performers, or “extras,” with small parts and no lines to deliver; still others work for theater companies, teaching acting courses to the public.

Directors interpret plays or scripts. In addition, they audition and select cast members, conduct rehearsals, and direct the work of the cast and crew. Directors use their knowledge of acting, voice, and movement to achieve the best possible performance, and they usually approve the scenery, costumes, choreography, and music.

Producers are entrepreneurs. They select plays or scripts, arrange financing, and decide on the size, cost, and content of a production. They hire directors, principal members of the cast, and key production staff members. Producers also negotiate contracts with artistic personnel, often in accordance with collective bargaining agreements. Producers work on a project from beginning to end, coordinating the activities of writers, directors, managers, and other personnel. Increasingly, producers who work on motion pictures must have a working knowledge of the new technology needed to create special effects.

Working Conditions

Acting demands patience and total commitment, because actors are often rejected in auditions and must endure long periods of unemployment between jobs. Actors typically work long, irregular hours, sometimes under adverse weather conditions that may exist “on location.” They also must travel when shows are “on the road.” Coupled with the heat of stage or studio lights and heavy costumes, these factors require stamina. Actors working on Broadway productions often work long hours during rehearsals, but generally work about 30 hours a week once the show opens. Evening work is a regular part of a stage actor’s life, as several performances are often held on one day. Flawless performances require